of this disclosure, including aortic arch aneurysms, dissecting aneurysms of the aortic arch, transposition of the great vessels, and other complex pathologies.

In addition to the making and use of endovascular implant grafts, other anatomic applications are also within the scope of the present disclosure. As an example, the mechanisms and principles disclosed herein may be applied to gastrointestinal disorders, where an intralumenal bypass may be desirable that may be placed using endoscopic techniques.

Crohn's disease (also known as regional) is a chronic, episodic, inflammatory bowel disease (IBD) and is generally classified as an autoimmune disease. Crohn's disease can affect any part of the gastrointestinal tract from mouth to anus; as a result, the symptoms of Crohn's disease vary among afflicted individuals. The disease is characterized by areas of inflammation with areas of normal lining between in a symptom known as skip lesions. The main gastrointestinal symptoms are abdominal pain, diarrhea (which may be bloody, though this may not be visible to the naked eye), constipation, vomiting, weight loss or weight gain. Crohn's disease typically involves the terminal ileum.

In an exemplary embodiment of a gastrointestinal aspect of the present disclosure, a tubular graft comprising proximal and distal sealable implant interfaces as disclosed herein is endoscopically placed and affixed proximally to and distally to a segment of intestine affected by Crohn's disease to divert the intestinal contents therethrough.

By providing an intraintestinal bypass for the conduit of intestinal contents though areas affected by Crohn's disease, local inflammatory response and sequelae in the affected areas are reduced.

Although the foregoing embodiments of the present disclosure have been described in some detail by way of illustration and example for purposes of clarity and understanding, it will be apparent to those skilled in the art that certain changes and modifications may be practiced within the spirit and scope of the present disclosure. Therefore, the description and examples presented herein should not be construed to limit the scope of the present disclosure.

Co-pending U.S. patent application Ser. No. 11/888,009, filed Jul. 31, 2007 is incorporated by reference herein in its entirety. Any other publications and patents mentioned in this disclosure are incorporated herein by reference in their entireties, for the purpose of describing and disclosing the constructs and methodologies described in those publications and patents, which might be used in connection with the methods of this disclosure. Any publications and patents discussed above and throughout the text are provided solely for their disclosure prior to the filing date of the present application. Nothing herein is to be construed as an admission that the inventors are not entitled to antedate such disclosure by virtue of prior invention.

In any application before the United States Patent and Trademark Office, the Abstract of this application is provided for the purpose of satisfying the requirements of 37 C.F.R. §1.72 and the purpose stated in 37 C.F.R. §1.72(b) "to enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure." Therefore, the Abstract of this application is not intended to be used to construe the scope of the claims or to limit the scope of the subject matter that is disclosed herein. Moreover, any headings that may be employed herein are also not intended to be used to construe the scope of the claims or to limit the scope of the subject matter that is disclosed herein. Any use of the past tense to describe an example otherwise indicated as constructive or prophetic is not intended to reflect that the constructive or prophetic example has actually been carried out.

We claim:

1. An endograft implant, comprising:

a tubular implant body comprising an elastic end and an implant lumen, the elastic end comprising a sealable circumferential collar having a diameter;

a variable sealing device contained within the sealable circumferential collar, the variable sealing device being operable to reversibly vary the diameter of the sealable circumferential collar;

a control lead releasably, directly, and mechanically connected to the variable sealing device for reversibly varying the diameter of the variable sealing device when the control lead is rotated and;

a plurality of retractable retention tines pivotally mounted within the variable sealing device such that, when the control lead is rotated to expand the diameter of the sealable circumferential collar, the retractable retention tines are exposed outwardly from the variable sealing device to engage an anatomic lumenal wall adjacent the elastic end and, when the control lead is rotated to reduce the diameter of the sealable circumferential collar, the retractable retention tines withdraw inwardly into the variable sealing device.

2. The endograft implant according to claim **1**, wherein the variable sealing device comprises:

a sealer belt provided in an overlapping loop comprising a sealer belt channel, sealer gear retainment slots within the sealer belt channel, and two sealer belt side walls, the plurality of retention tines being pivotally mounted within the sealer belt channel, the retention tines within the outermost sealer belt channel circumference being disposed outwardly to engage an anatomic lumenal wall;

a compressible foam gasket contained within the sealer belt channel and situated between the sealer belt and an outermost circumference of the sealable circumferential collar;

a sealing device housing comprising a sealer gear having an axis parallel with the axis of the sealer belt and being rotatably mounted within the sealing device housing to interface with the sealer gear retainment slots; and

a spring interface within the sealer gear releasably connected to the control lead such that axial compression of the spring interface with the control lead unlocks a locking member and allows rotation of the sealer gear to reversibly vary the diameter of the variable sealing device.

3. The endograft implant according to claim **2**, wherein the sealer belt is fabricated of titanium, stainless steel, a cobalt chromium alloy, a metal, a metal alloy, a polymer, a plastic, or a ceramic.

4. The endograft implant according to claim **1**, wherein the sealable circumferential collar comprises an expandable mesh.

5. The endograft implant according to claim **1**, wherein the sealable circumferential collar comprises a self-expandable mesh endoskeleton or self-expandable mesh exoskeleton capable of self-expanding such that longitudinal traction on the expanded mesh reduces the circumference of the sealable circumferential collar.

6. The endograft implant according to claim **1**, wherein the endograft implant comprises a biocompatible material or is coated with a biocompatible material.